

REMARKS

The Office Action of June 26, 2007 has been carefully considered and the indication that all of the claims, i.e., claims 1-10, contain allowable subject matter but are objected to only for formal reasons, has been noted with appreciation.

Initially, it is pointed out that, as discussed with the Examiner during a telephone interview on July 17, 2007, the objection to claims 4-10 under 37 CFR 1.75(c) as being in improper form since a multiple dependent claim cannot depend from a multiply dependent claim is unwarranted since there are no multiple dependent claims pending in the application. That is, the claims were amended to remove the multiply dependent claims in a Preliminary Amendment filed when the application was filed on June 9, 2005. Thus this ground of objection should clearly be withdrawn.

In this Amendment, the specification has been amended to provide legends for the various sections of the application, and the claims have been amended to correct noted informalities and to overcome the Examiner's formal objections. In particular, the claims have been amended to avoid each of the antecedent problems pointed out by the Examiner, with the exception of the objection to claim 10 since antecedent basis for the term "the correction constant K1" is found in claim 8 where the correction constant is defined.

In order to overcome the Examiner's objection to claim 2, claim 1 has been amended to change "detection" in step S2 to "determining". With this amendment, it is submitted that there is no inconsistency between claims 1 and 2. It is pointed out that although the dynamic internal resistance may be measured, it is usually calculated from the voltage and current settings using a software algorithm implemented, e.g., in the control unit.

With regard to claim 5, and also claim 9, it is submitted that the equations are clear and proper. For the equations, voltage and current are calculated by integration over time, with the integration variable being time. However, the integration is made numerically (not continuously) using discrete supporting instants in time. After integration, there is no dependency on time and $U_{filt\ t_n}$ is identical to U_{filt} . The calculation is repeated over and over. Thus the equations are correct as stated. However, if necessary the term t_n in the equations may be omitted. The same explanation is applicable to the objection to claim 9.

.In response to the objection to the term "a filter constant", claim 4 has been amended to state that the constant is for the low pass filter of claim 1 used to produce the filtered battery voltage. This filter may be hardware but preferably is realized by software to make it easier to fit the prediction algorithm to different types of batteries. The fitting parameter is the filter constant and is conventional.

Claim 5 has been amended to more clearly explain the desired limitation. That is, if after start of the method, step S2 determines that the present functional procedure is a first procedure of the method after start thereof, i.e., the bit produced in step S12 is not yet present, then steps S3 and S4 are skipped and step S5 is carried out as explained in the application. In the second and subsequent functional procedures the bit will be present and thus steps S3 and S4 will be carried out between steps S2 and S5.

Finally, no amendment to claim 10 has been made since "the correction factor K1" finds clear antecedent basis in claim 8.

Accordingly, in view of the above amendments and for the above stated reasons, it is submitted that all of the objections to the claims have been overcome or shown to be unwarranted. Accordingly, the allowance of claims 1-10 and the passing of this application to issue are respectfully requested.

If the Examiner is of the opinion that the prosecution of this application would be advanced by an interview, the Examiner is invited to telephone undersigned counsel to arrange for such an interview.

Respectfully submitted,

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